

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A fluorine-containing polymer comprising 70 to 95% by weight of tetrafluoroethylene, 5 to 25% by weight of hexafluoropropylene and 0 to 20% by weight of perfluoroalkyl vinyl ether,

wherein a melt flow rate (MFR) (g/10 min., ASTM D2116) at 372°C is within a range from 0.1 to 100, and

the total content (ppm) of an alkali metal and an alkali earth metal does not exceed the value obtained by calculating from the melt flow rate (MFR) at 372°C according to the formula (1):


$$5.2 \times e^{0.125(\text{MFR})} + 2 \quad (1)$$

and exceeds the value obtained by calculating according to the formula (2):

$$0.35 \times e^{0.125(\text{MFR})} \quad (2), \text{ and}$$

wherein ~~-CF₂H~~ accounts for at least half of polymer chain terminals and substantially all polymer chain terminals comprise ~~-CF₂H, or -CF₂H and -CH₃.~~

2. Deleted

3. (Currently Amended) An electric wire or cable coated with a fluorine-containing polymer wherein the total content (ppm) of an alkali metal and an alkali earth metal does not exceed the value obtained by calculating from a melt flow rate (MFR) (g/10 min., ASTM D2116) at 372°C according to the formula (1):

$$5.2 \times e^{0.125(MFR)} + 2 \quad (1)$$

and exceeds the value obtained by calculating according to the formula (2):

$$0.35 \times e^{0.125(MFR)} \quad (2), \text{ and}$$

wherein ~~-CF₂H-accounts for at least half of polymer chain terminals and substantially all polymer chain terminals comprise -CF₂H, or -CF₂H and -CH₃.~~

4. Deleted

5. (Previously Presented) The electric wire or cable according to claim 3, wherein the fluorine-containing polymer is a fluorine-containing polymer prepared by emulsion polymerization.

6. (Currently Amended) The electric wire or cable according to claim 3 or 5, wherein the fluorine-containing polymer ~~is a copolymer comprising at least two~~ comprises the three monomers ~~selected from the group consisting of~~ tetrafluoroethylene, hexafluoropropylene and perfluoroalkyl vinyl ether.

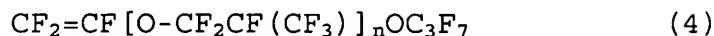
7. (Previously Presented) The electric wire or cable according to claim 3, wherein the contained alkali metal and alkali earth metal comprise at least one of potassium and sodium.

8. (New) The fluorine-containing polymer according to claim 1, wherein the tetrafluoroethylene is present in an amount of 72 to 96% by weight, and the hexafluoropropylene is present in an amount of 4 to 28% by weight.

9. (New) The fluorine-containing polymer according to claim 1, wherein the perfluoroalkyl vinyl ether is present and is represented by formula (3):



wherein m is an integer of 1 to 6, or a vinyl ether represented by the formula (4)

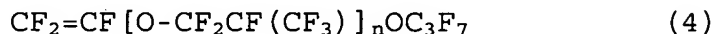


wherein m is an integer of 1 to 4.

10. (New) The electric wire or cable according to claim 6, wherein the perfluoroalkyl vinyl ether is present and is represented by formula (3):



wherein m is an integer of 1 to 6, or a vinyl ether represented by the formula (4)



wherein m is an integer of 1 to 4.

11. (New) The fluorine-containing polymer according to claim 1, wherein the contained alkali metal and alkali earth metal comprise at least one of potassium and sodium.

12. (New) The electric wire or cable according to claim 6, wherein the contained alkali metal and alkali earth metal comprise at least one of potassium and sodium.

13. (New) The fluorine-containing polymer according to claim 1, wherein the total content (ppm) of an alkali metal and an alkali earth metal does not exceed the value obtained by calculating from the melt flow rate (MFR) at 372°C according to the formula (5):

$$1.3 \times e^{0.125(MFR)} + 2 \quad (5)$$

and exceeds the value obtained by calculating according to the formula (6):

$$0.7 \times e^{0.125(MFR)} \quad (6).$$

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14. (New) The electric wire or cable according to claim 3, wherein the total content (ppm) of an alkali metal and an alkali earth metal does not exceed the value obtained by calculating from the melt flow rate (MFR) at 372°C according to the formula (5):

$$1.3 \times e^{0.125(MFR)} + 2 \quad (5)$$

and exceeds the value obtained by calculating according to the formula (6):

$$0.7 \times e^{0.125(MFR)} \quad (6).$$